MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2016/2017

EME 4216 - QUALITY MANAGEMENT

(ME Groups)

1 JUNE 2017
2.30 p.m. - 4.30 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENTS

1. This Question paper consists of 3 pages with 4 Questions only.

2. Attempt **ALL** questions. All questions carry equal marks and the distribution of the marks for each question is given.

3. Please write all your answers in the Answer Booklet provided.

QUESTION 1

a) Strategic planning is the process whereby organization develops a vision, a mission, objectives and guiding principles. Before beginning the planning process, an organization should conduct a SWOT analysis. Discuss with relevant examples, how management conduct SWOT analysis.

[16 marks]

b) Corporate reputation is a valuable strategic asset for every company. A company's reputation is based upon the customer's perception of its quality. Discuss these statements and give relevant examples.

[9 marks]

QUESTION 2

(a) Assume you have just joined an engineering company that specializes in providing industrial solutions to customers. Your first project assigned to you is to a local manufacturing company producing high precision machined products for the oil and gas industry. The customer is requesting proposals on methods that they can employ to further improve their manufacturing process and cost-efficiency.

Describe and assess with relevant examples to this company, the usage of the Check Sheet, Pareto Charts and Five-S in your proposal for the implementation of Total Quality Tools in the company.

[8+8+9 marks]

Continued ...

QUESTION 3

(a) Even the best-managed companies have problems. Problem solving from a total quality perspective is not just about "putting out the fires" when they occur. In theory, a problem is only solved when the recurrence of the problem has been reduced to near impossible or less probable.

The *Plan-Do-Check-Adjust (PDCA) Cycle* is still an effective continual improvement tool. It is a generic and basic format tool which can bring order and logic to the problem-solving process. Analyze and write short notes on each of the 4 major components necessary to this step-by-step problems-solving method. Include suitable and relevant examples for each of the above components.

[4 x 5 marks]

(b) Decision-making is the process of selecting one course of action from among two or more alternatives. The decision-making process can also be described as a logically sequenced series of activities through which decisions are made. Analyze and describe (in your own words) the *Juran's 85/15 Rule* in the scientific approach in making decisions when applied in an automobile assembly company.

[5 marks]

QUESTION 4

Continual Improvement is one of the most fundamental elements of total quality. It is fundamental to success in the global marketplace. Companies need to continually improve and innovate new products and processes to meet customer needs. Assess each of the following continual improvement strategies when applied in the automobile industry. Explanations and assessment of the strategies with relevant examples must be given.

i. *Stockless production*
ii. *Kaizen approach*
iii. *Six Sigma concept*

[5+10+10 marks]

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